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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,697

04/18/2006

Marian Trinkel

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EXAMINER

ARCHER, CHRISTOPHER B

ART UNIT

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4148

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,697	Applicant(s) TRINKEL, MARIAN	
	Examiner CHRISTOPHER B. ARCHER	Art Unit 4148	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 4-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/07/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The instant application having Application No. 10/541,697 filed on 04/18/2006 is presented for examination by the examiner.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63**.

Specification

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

Art Unit: 4148

- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

4. Claims 4, 5, 6, 7 and 8 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hartman, Jr. (US Patent No. 5,444,780), hereafter referred to as Hartman.

Regarding claim 1:

Hartman discloses "A method for providing a time stamp by means of a tamper-proof time signal (5, 10) via a telecommunications network (2), wherein a network user (1a, 1b, . . . , 1e) requests an, in particular, officially recognized time signal (5, 10) from an, in particular, certified central system (3); said time signal being encrypted by the central system (3) with at least one key, transmitted to the network user (1a, 1b, . . . , 1e) via the telecommunications

Art Unit: 4148

network (2) after encryption, and decrypted by this network user with the same key or keys” as **[(Hartman column 4, lines 54-56, 66-68, column 5, lines 28-43) shows a client computer requesting a time signal from a recognized server. The server responds to the request by sending an encrypted time signal to the client. The client then decrypts the time signal using the same key that the server used to encrypt it].**

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hartman in view of Fruehauf et al. (US Patent No. 6,590,981), hereafter referred to as Fruehauf.

Regarding claim 2:

Hartman teaches “The method as recited in Claim 1,” but fails to explicitly disclose “wherein at least one key, which is present at both the network user (1a, 1b, . . . , 1e) and at a central system (3), changes synchronously at the network user and at the central system, especially after predetermined time intervals.”

However, Fruehauf teaches “wherein at least one key, which is present at both the network user (1a, 1b, . . . , 1e) and at a central system (3), changes synchronously at the network user and at the central system, especially after predetermined time intervals” as **[(Fruehauf column 2 lines 7-10, 14-22, 29-34)**

Art Unit: 4148

shows a cryptographic communication system with time synchronized keys that change after a predetermined period of time, being used for encryption and decryption between sender and receiver locations].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the teaching of Fruehauf into Hartman's as both are analogous art from the same field of endeavor of secure time-coordinated transmission.

The ordinary skilled person would have been motivated to apply the teaching of Fruehauf into Hartman's, since Fruehauf provides a means of using a synchronized time signal to facilitate secure transmissions between devices.

9. Claims 3, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartman in view of Fruehauf and further in view of Sinha et al. (US Patent No. 6,944,188), hereafter referred to as Sinha.

Regarding claim 3:

Hartman and Fruehauf teach "The method as recited in one of the preceding claims" and "operating synchronously to generate a key which changes synchronously in time" but fail to explicitly disclose "each two of these clock systems (4a-6a, 4b- 6b, . . . , 4e-6e) being assigned to each other and to the network user (1a, 1b, . . . , 1e)."

However, Sinha teaches "wherein the network user (1a, 1b, . . . , 1e) and the central system (3) are each provided with at least one clock system (4a, 4b, .

Art Unit: 4148

. . . , 4e, 6a, 6b, . . . , 6e); each two of these clock systems (4a-6a, 4b- 6b, . . . , 4e-6e) being assigned to each other and to the network user (1a, 1b, . . . , 1e)” as **[(Sinha, column 4 lines 20-23, and column 5 lines 51-56, 63-64) shows that a plurality of clock pairs, in the form of master and slave clocks, are commonly used across a network]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the teaching of Sinha into Hartman as both are analogous art from the same field of time synchronization of clock pairs that are distributed across a network.

The ordinary skilled person would have been motivated to apply the teaching of Sinha into Hartman's, since Sinha provides an explicit relationship between clock pairs that are distributed across a network.

Regarding claim 9:

Sinha teaches “A system for generating a tamper-proof time stamp in network-based communication systems, wherein the system includes a central system (3) and one each clock system (4a, 4b, . . . , 4e, 6a, 6b, . . . , 6e) on the side of a network user (1a, 1b, . . . , 1e) and on the side of the central system (3); the clock systems (4a-6a, 4b-6b, . . . , 4e-6e) being assigned to each other and to the network user (1a, 1b, . . . , 1e)” as **[(Sinha, column 4 lines 20-23, and column 5 lines 51-56, 63-64) shows that a plurality of clock pairs, in the form of master and slave clocks, are commonly used across a network]**, but

Art Unit: 4148

fails to explicitly disclose “operating synchronously to generate a key which changes, in particular, at intervals of time, and with which an, in particular, officially recognized time signal (5, 10) can be encrypted in the central system (3) and decrypted by the network user (1a, 1b, . . . , 1e) after it is sent to this network user.”

However, Fruehauf combined with Hartman teaches “operating synchronously to generate a key which changes, in particular, at intervals of time, and with which an, in particular, officially recognized time signal (5, 10) can be encrypted in the central system (3) and decrypted by the network user (1a, 1b, . . . , 1e) after it is sent to this network user” as **[(Fruehauf column 2 lines 7-10, 14-22, 29-34) shows a cryptographic communication system with time synchronized keys that change after a predetermined period of time, being used for encryption and decryption between sender and receiver locations. (Hartman column 4, lines 54-56, 66-68, column 5, lines 28-43) shows a client computer requesting a time signal from a recognized server. The server responds to the request by sending an encrypted time signal to the client. The client then decrypts the time signal using the same key that the server used to encrypt it].**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the teaching of Fruehauf into Hartman's as both are analogous art from the same field of endeavor of secure time-coordinated transmission.

Art Unit: 4148

The ordinary skilled person would have been motivated to apply the teaching of Fruehauf into Hartman's, since Fruehauf provides a means of using a synchronized time signal to facilitate secure transmissions between devices.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the teaching of Sinha into Hartman as both are analogous art from the same field of time synchronization of clock pairs that are distributed across a network.

The ordinary skilled person would have been motivated to apply the teaching of Sinha into Hartman's, since Sinha provides an explicit relationship between clock pairs that are distributed across a network.

Regarding claim 10:

Fruehauf further teaches "wherein the central system (3) is formed by a time signal transmitter (5)" as **[(Fruehauf column 3 line 47 to column 4 line 19) shows that a time reference can be obtained from one of various officially recognized time sources]**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER B. ARCHER whose telephone number is (571)270-7308. The examiner can normally be reached on M-F 7:30-5.

Art Unit: 4148

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Pham can be reached on (571)272-3689. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHRISTOPHER B ARCHER/
Examiner, Art Unit 4148

/THOMAS K PHAM/
Supervisory Patent Examiner, Art Unit 4148